

Pediatric COVID-19 update: January 14, 2022

HOSPITAL ADMISSIONS – Key Takeaways

From the week of December 5-11, 2021 to the week of January 2-8, 2022, hospital admissions for or with COVID-19 among people aged ≤ 18 years increased more than 7-fold statewide (e.g. more than +700%, or an 8-times relative change), while those for all age groups combined increased only 3-fold statewide. Across the state, hospital admissions for or with COVID-19 increased approximately:

- 16-fold for those ≤ 18 years and 8-fold for all age groups in NYC,
- 9-fold for those ≤ 18 years and 4-fold for all age groups in mid-Hudson and Long Island,
- 1.9-fold for those ≤ 18 years and 0.4-fold for all age groups in other regions of New York.

The increase in hospital admissions for or with COVID-19 is greater for children than for the population overall. In the most recent week, 54% of children ≤ 18 years admitted had no comorbidities and 64% were symptomatic.

During January 2-8, 2022, among the 47% of children admitted with but not primarily for COVID-19, the most common reasons for admission were acute and chronic medical conditions. COVID-19 may have been an exacerbating factor contributing to the need for hospitalization, but the significance of the COVID-19 diagnosis cannot be determined from these data. Statewide, injury or trauma represented 3% of admissions with COVID-19 (only 18 out of the 605 admissions that week).

The large increases over time have been observed for children admitted both for COVID-19 and for other reasons, but with a positive COVID-19 result. In this time-period, New York City saw a 15-fold increase in admissions for COVID-19 (191 vs. 12) and 18-fold increase in admissions with COVID-19, but primarily for other reasons (186 vs. 10).

Analyses suggest the relatively greater increases in hospitalizations for children may be due to reduced vaccine coverage combined with modestly reduced vaccine effectiveness against hospitalization for children 5-17 years, and the absence of vaccines for children 0-4 years.

Notably, among children admitted to the hospital for or with COVID-19 during the week of January 3-9, 2022,

- 4% of 5 to 11 year olds were vaccinated and 90% were unvaccinated
- 31% of 12 to 17 year olds were vaccinated and 61% were unvaccinated.

ACTION: These observed trends in hospital admissions for and with COVID-19 among those ≤ 18 years of age highlight the need to redouble efforts to protect the health of our youngest New Yorkers. Vaccination of children remains a critical, highly protective strategy and should be combined with other measures to reduce exposure, such as mask wearing. Children ≤ 4 years of age are not currently eligible for vaccination. Therefore, additional protective measures remain important to safeguard their health during the current winter wave, including vaccinating, boosting and masking by those around them.

HOSPITAL ADMISSIONS – Additional Details

As Table 2 shows, the highest rate of hospitalization is among persons ≥ 65 years. Older age is a risk-factor for severe COVID-19 and this group has been disproportionately affected by severe disease throughout the pandemic.

In contrast, despite lower absolute rates of hospitalization, the most rapid relative increases in hospitalizations have been observed for children ≤ 18 years (Table 2, Figure 3).

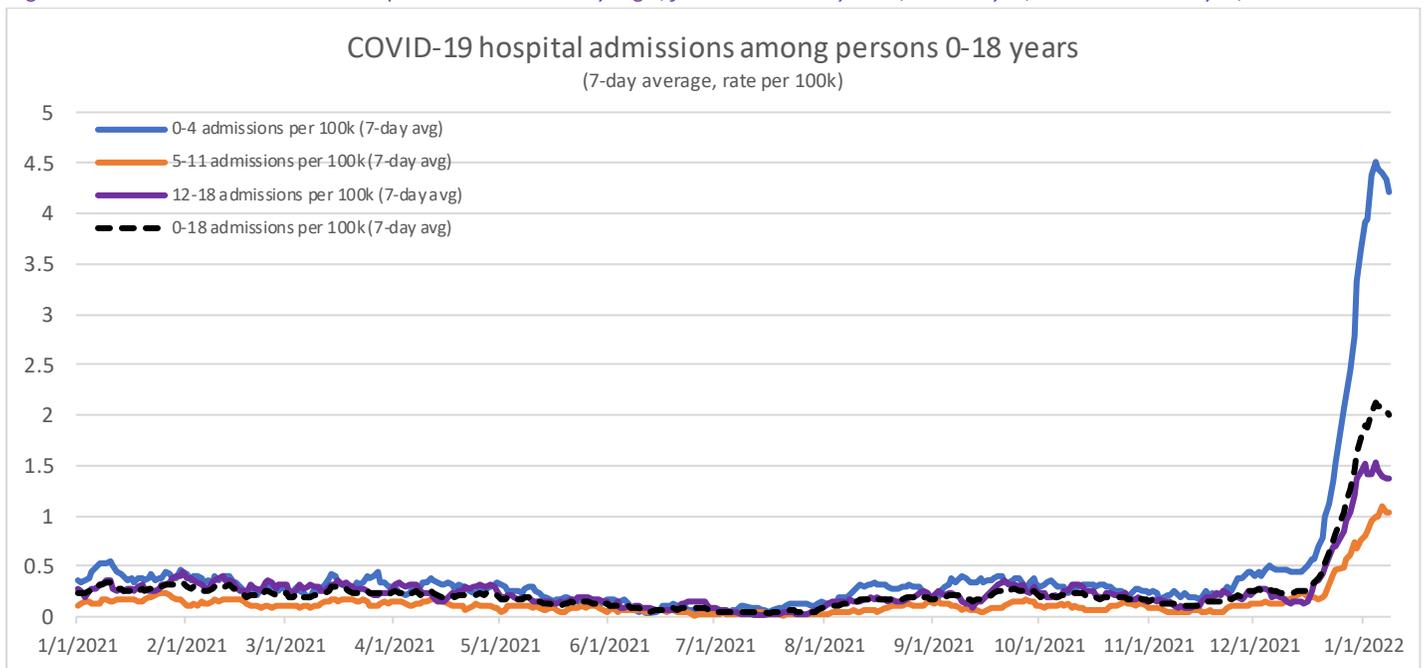
Among children, rates have grown fastest for ages 0-4 years, a group that remains ineligible for vaccination. The January 2-8, 2022 average hospitalization rate for children 0-4 years of 4.21 per 100,000 exceeds the average rates observed for adults 19-64 through late December 2021, indicating a high burden of hospitalization for this age group.

Table 2. COVID-19 new hospital admission rates by age, December 5, 2021 – January 8, 2022

	0-4 years		5-11 years		12-18 years		19-64 years		65+ years	
	Rate	Change since Dec. 5-11	Rate	Change since Dec. 5-11	Rate	Change since Dec. 5-11	Rate	Change since Dec. 5-11	Rate	Change since Dec. 5-11
December 5 - 11	0.44	--	0.18	--	0.13	--	1.87	--	7.62	--
December 12 - 18	0.56	+29%	0.19	+5%	0.34	+153%	2.17	+16%	7.94	+4%
December 19 - 25 (excl. 25 th)	1.43	+226%	0.42	+130%	0.60	+353%	2.78	+48%	8.70	+14%
December 26 – January 1	3.91	+791%	0.79	+335%	1.52	+1,047%	6.39	+241%	21.87	+187%
January 2 – January 8	4.21	+860%	1.03	+465%	1.38	+940%	7.19	+284%	29.78	+291%

* Rates are 7-day average admissions per 100,000

Figure 3. Trends in COVID-19 hospital admissions by age, focus on 0-18 years, January 1, 2021 – January 8, 2022



FULL REPORT

**Office of Public Health
New York State Department of Health**

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Summary

On December 24, 2021, the New York State Department of Health [issued a health advisory](#) regarding a rise in COVID-19-associated hospital admissions for children due to and with COVID-19. This was followed by a report on January 7, which provided a comprehensive update to the information in that advisory. This second report represents a next installment on this topic, covering data through January 8, 2022.

Key findings include:

- Cases are proportionally rising for all age groups; however, hospitalizations continue to increase fastest for children ≤ 18 years, particularly those 0-4 years, who remain unvaccinated.
- Between the week of December 5-11, 2021 and January 2-8, 2022, there was:
 - A 16-fold increase in hospital admissions for persons 0-18 years in NYC, a 9-fold increase for mid-Hudson/Long Island, and a 1.9-fold increase in other regions. This yielded a more than 7-fold statewide increase in hospital admissions of people aged 0-18 years.
 - During this same time period, admissions for all age groups rose approximately 8-fold for NYC and 3-fold statewide, illustrating the greater increase for children relative to the general population.
 - During January 2-8, 2022, among the 47% of children admitted with but not primarily for COVID-19, the most common reasons for admission were acute and chronic medical conditions. COVID-19 may have been an exacerbating factor contributing to the need for hospitalization and cannot be determined from these data. Statewide, injury or trauma represented 3% of admissions with COVID-19 (only 18 out of the 605 admissions that week).
 - The large increases over time have been observed for children admitted both for COVID-19 and for other reasons. In this time period, New York City saw a 15-fold increase in admissions for COVID-19 (191 vs. 12) and 18-fold increase in admissions for other reasons, but with COVID-19 (186 vs. 10).
- Across reasons for admission, COVID-19 symptoms were common, reported respectively for 70% and 64% of admissions in each of the previous 2 weeks statewide. About half of children had comorbidities.
- An analysis of breakthrough infections and vaccine effectiveness suggests that the relative increases in hospitalizations for children may be due to the combination of reduced vaccine coverage *and* modestly reduced vaccine effectiveness against hospitalization for children 5-17 years, relative to adults, and the absence of vaccine coverage for children 0-4 years.

Together these findings suggest an important pattern of increasing severe COVID-19 disease in the pediatric population. This may be explained by a combination of lower full vaccination (and booster) coverage, changes in vaccine effectiveness, or other factors. Nonetheless, these data support that to directly protect the health of our youngest New Yorkers, vaccination of children remains a critical, highly protective strategy and should be combined with other measures to reduce exposure, such as mask wearing. Children 0 to 4 years are not currently eligible for vaccination and such additional measures remain important to protecting their health during the current winter wave.



Detail

Data sources

This report contains information from 3 statewide New York State databases, which have been used for ongoing public reporting and analyses since the outset of the COVID-19 pandemic:

- **Electronic Clinical Laboratory Reporting System (ECLRS).** This New York State Department of Health (NYS DOH) system collects all reportable COVID-19 test results (nucleic acid amplification test [NAAT] or antigen) in New York State.^{1,2}
- **Health Electronic Response Data System (HERDS).** This NYS DOH program includes a statewide, daily electronic survey of all inpatient facilities in New York. Data on new admissions and current hospitalizations with a laboratory-confirmed COVID-19 diagnosis are entered into HERDS daily by trained hospital staff members. Note, no information was reported to HERDS on December 25, 2021. Data for this day were reported on December 26.
- **New York State Immunization Information System (NYSIIS) and the Citywide Immunization Registry (CIR).** These two systems are respectively used by NYS DOH and NYC Department of Health and Mental Hygiene to collect and store all COVID-19 provider vaccination data for persons residing in New York State, outside of New York, and in New York City (excluding selected settings reporting only to the federal government).²⁻⁴

Laboratory-confirmed COVID-19 (e.g. positive test results, cases)

Key findings

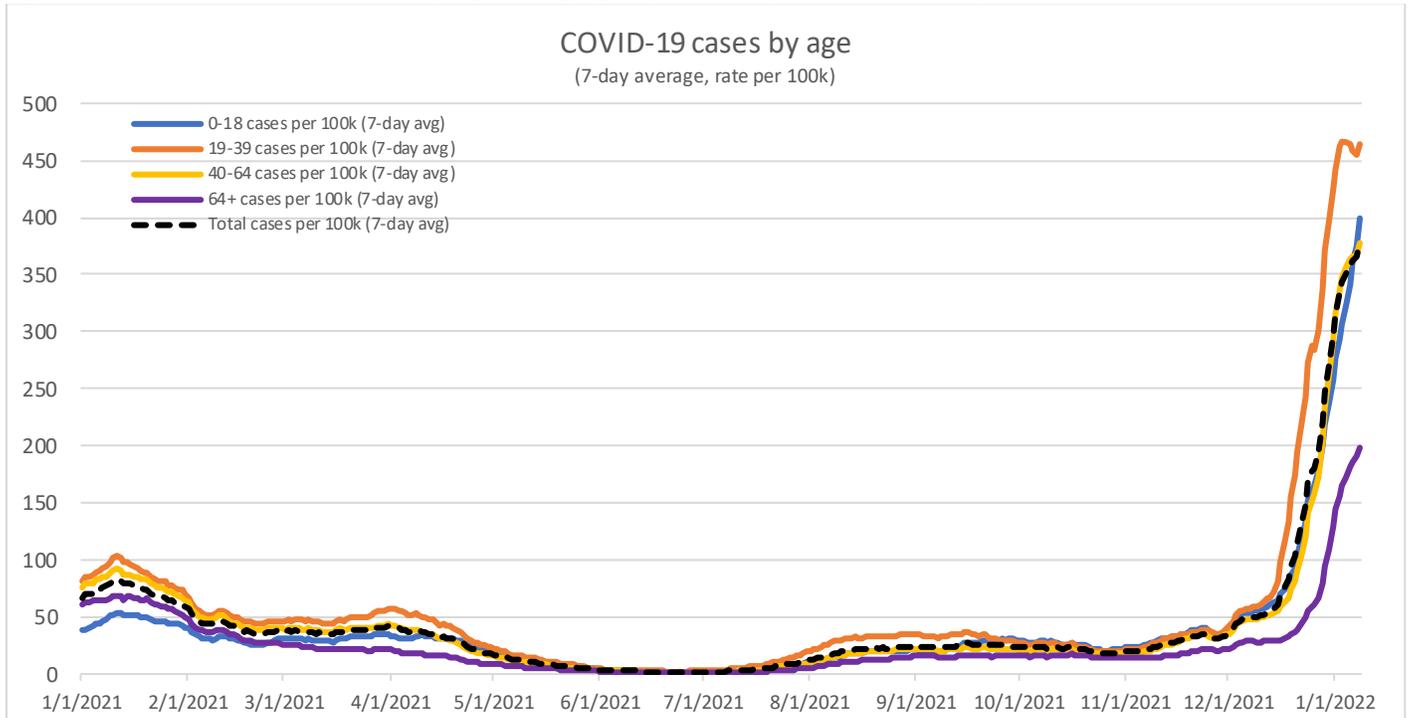
Trends in laboratory-confirmed COVID-19 are shown in Table 1 and Figures 1-2. Over the previous month, during the current winter wave, the numbers of reported cases and rates have reached all-time high levels in New York State. Before this wave, the largest single-day reported number of cases was 19,942 on January 14, 2021 (rate: 102/100,000 persons). Although rates have increased and are high for all groups, the highest rates are among those < 65 years, particularly those 12-17 years (451 per 100,000), 5-11 years (421 per 100,000), and 18-64 years (418 per 100,000). Note these results include results reported to ECLRS only and do not include home tests that may not have been reported, nor undiagnosed infections.

Table 1. COVID-19 Cases by age, 1/08/22 and change from previous week

Age group	# new cases	Rate per 100,000		
	1/08/22	1/08/22	7-day average	Change vs. prior 7 days
0-4	3913	343.1	307.8	(+36.3%)
5-11	7659	489.7	420.9	(+58.6%)
12-17	6691	490.7	451.1	(+41.5%)
18-64	53875	439.4	418.2	(+11.6%)
65+	7637	237.7	206.1	(+35.8%)
Total	79,777	408.2	379.4	(+19.8%)

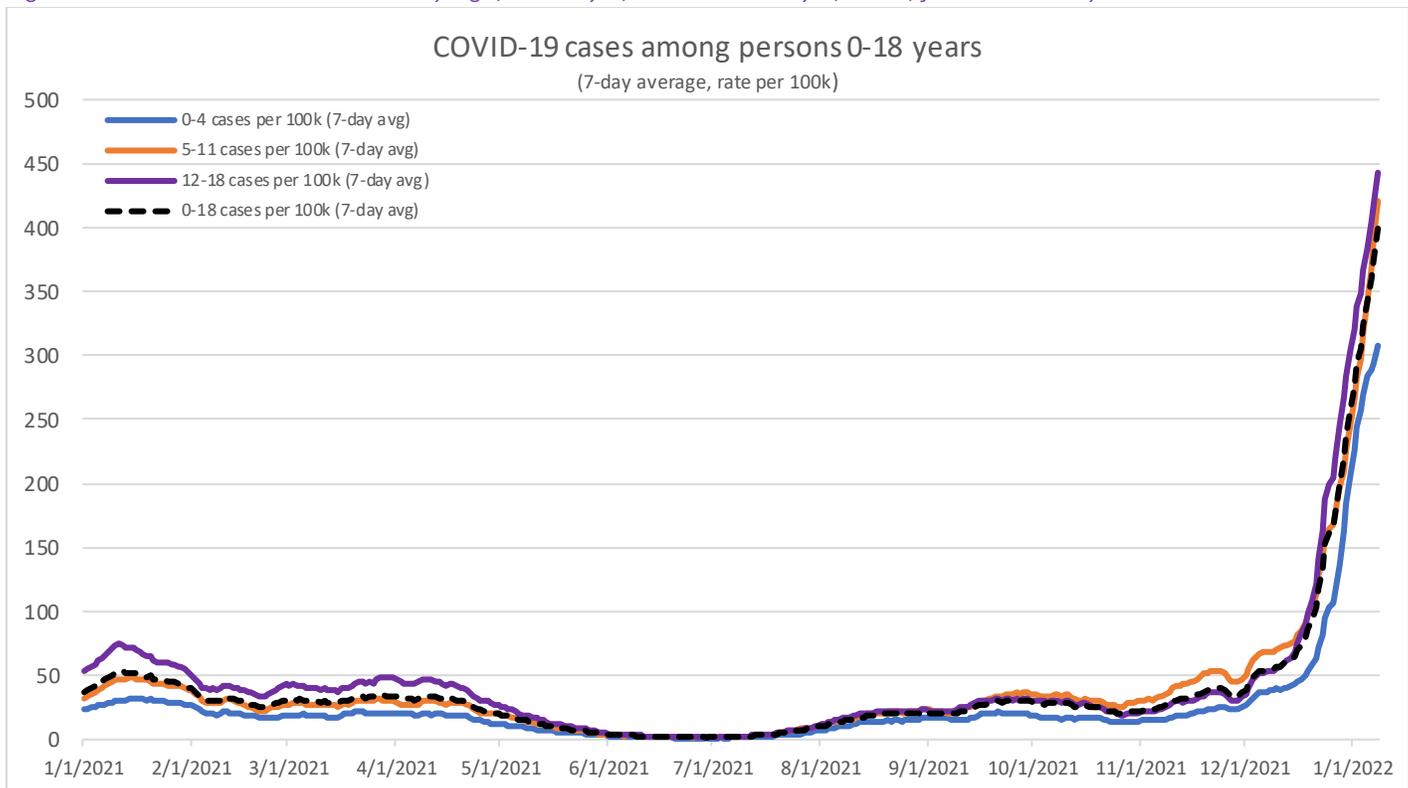
Source: ECLRS

Figure 1. Trends in COVID-19 Cases by age, all age groups, January 1, 2021 – January 8, 2022



Source: ECLRS

Figure 2. Trends in COVID-19 Cases by age, January 1, 2021 – January 8, 2022, focus on 0-18 years



Source: ECLRS

New hospital admissions and current hospitalizations

Overall trends by age

Key findings

- New admissions represent persons newly hospitalized with laboratory-confirmed COVID-19. Persons seen in an emergency department for illness or injuries, but not admitted to the hospital, are not included in these data. In comparison to positive test data above, which represent asymptomatic and symptomatic cases confirmed with a reported result, these data represent severe disease associated with COVID-19.
- Per Table 2, the highest rates of new admissions are seen among persons ≥ 65 years. Older age is a risk-factor for severe COVID-19 and this group has been proportionally most affected by severe disease throughout the pandemic.
- In contrast, despite lower absolute rates of hospitalization, the most rapid relative rises in hospitalizations have been observed for children ≤ 18 years (Table 2, Figure 3).
- Per Figure 3, among children, rates have grown fastest for ages 0-4 years, a group that remains unvaccinated. The current 7-day average hospitalization rate for children 0-4 years of 4.21 per 100,000 exceeds statewide average rates observed for *all ages* in mid-November 2021, indicating a high admissions burden for this age group in particular.
- The next sections of this report describe this greater hospitalization risk for children in greater detail.

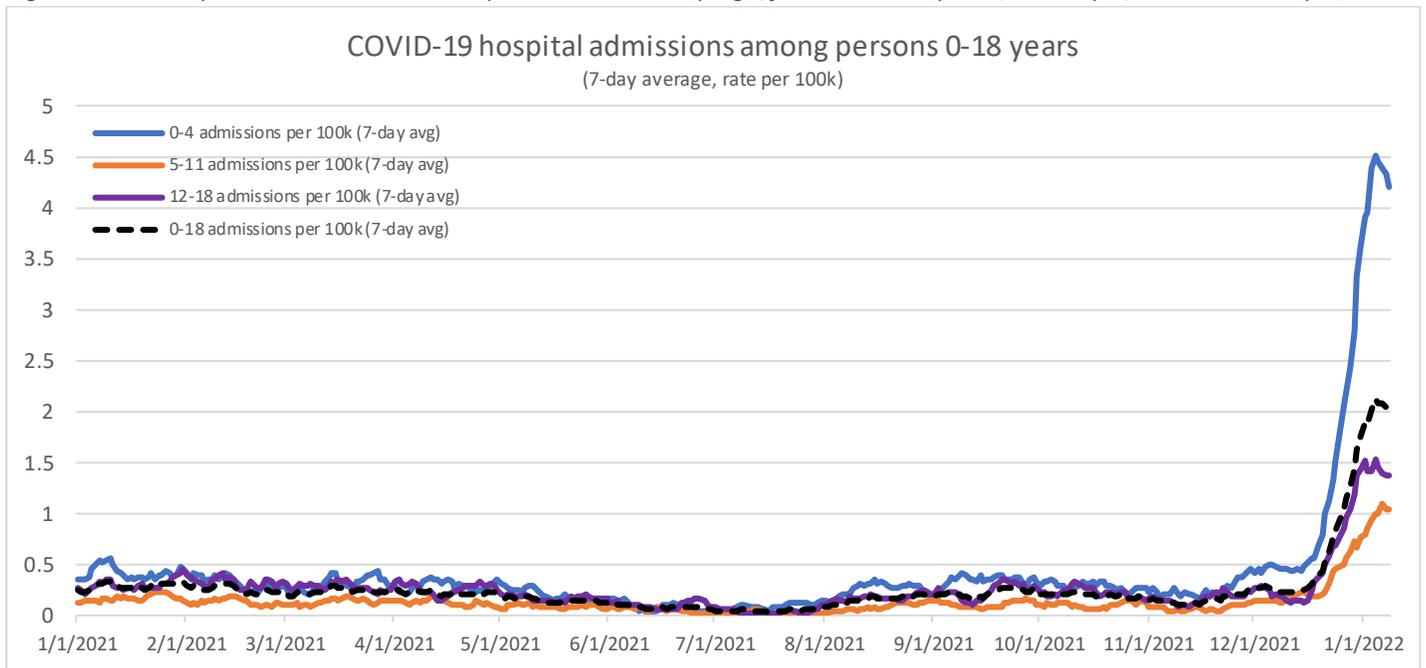
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December 5 - 11	0.44	--	0.18	--	0.13	--	1.87	--	7.62	--
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* Rates are 7-day average admissions per 100,000

Source: HERDS

Figure 3. Monthly trends in COVID-19 hospital admissions by age, focus on 0-18 years, January 1, 2021 – January 8, 2022





Focus on new admissions among children 0-18 years

Key findings:

- Pediatric hospitalizations have increased fastest in NYC and mid-Hudson/Long Island regions (Table 3). Between the week of December 5-11, 2021 and January 2-8, 2022:
 - There was a 16.1-fold increase in hospital admissions for persons 0-18 years in NYC (e.g., about +1600%, or a 17-times relative change), a 9.4-fold increase for mid-Hudson/Long Island, and a 1.9-fold increase in other regions. This yielded a statewide 7.6-fold increase in hospital admissions of people aged 0-18.
 - Admissions for all age groups rose approximately 8-fold for NYC and 3-fold statewide, illustrating the greater increase for children relative to the general population.
 - Statewide, 1,663 persons 0-18 years were hospitalized, of which 987 were in New York City.
- Fifty-six percent of hospitalizations were in children 0-4 years, who comprise 26% of the 0-18 population and remain unvaccinated.
- Patients with reasons other than COVID-19 indicated may have had COVID-19 as a contributing cause for hospitalization and often have symptoms of COVID-19.⁵ The causal role of COVID-19 in hospital admissions is challenging to ascertain in real time, and often requires in-depth medical chart review after discharge. Because of this, all admissions “with COVID-19” are used to describe the total burden of hospitalizations associated with COVID-19. Details on the indicated reasons for admission are presented in Tables 4-7:
 - Per Tables 4-5, the most recent reporting week, January 2-8, 2022, shows a slight decline in admissions with the reason “for COVID-19” indicated over the prior reporting week (53% vs. 59%). For context, the year prior, this was 53% during the December 20-26, 2020 week and 51% during the December 27, 2020-January 2, 2021 week.
 - The large increases noted above have been sustained for the week of January 2-8, 2022, showing children admitted both for COVID-19 and for other reasons (Table 4). For example, New York City saw a 14.9-fold increase in admissions for COVID-19 (191 vs. 12) and 17.6-fold increase in admissions for other reasons, but with COVID-19 (186 vs. 10).
 - Between January 2-8, 2022, among children not primarily admitted for COVID-19, but with a COVID-19 diagnosis, the most common reasons for admission were acute and chronic medical conditions (Table 6). COVID-19 may have been an exacerbating factor contributing to the need for hospitalization and cannot be determined from these data. Injury or trauma represented 3% of admissions with COVID-19.
- Across reasons for admission, COVID-19 symptoms were common, reported respectively for 69% and 66% of admissions in the previous 2 weeks in New York City, and 70% and 64% statewide.
- In the previous 2 weeks, comorbidities were present in a little under one-half of COVID-19 admissions. This indicates both the degree to which the most vulnerable children are being impacted by severe COVID-19 outcomes and to which other children without pre-existing conditions are also being impacted.



Table 3. New admissions with laboratory-confirmed COVID-19, ages 0-18 years, by region and week

Week	New York City				Mid-Hudson & Long Island				Other Regions				Statewide
	0-4y	5-11y	12-18y	Total	0-4y	5-11y	12-18y	Total	0-4y	5-11y	12-18y	Total	Total
November 28– December 4	11	3	9	23	2	2	5	9	25	11	17	53	85
December 5 - 11	8	8	6	22	6	4	2	12	21	8	7	36	70
December 12 - 18	20	11	12	43	6	5	5	16	19	5	21	45	104
December 19 - 25 (excl. 25 th)	74	32	31	137	21	6	18	45	19	8	19	46	228
December 26– January 1	224	60	101	385	54	16	42	112	34	11	29	74	571
January 2 - 8	206	82	89	377	79	15	31	125	51	16	36	103	605
Total	543	196	248	987	168	48	103	319	169	59	129	357	1,663

Source: HERDS

Table 4. Indicated reason for admission, among new admissions with COVID-19, previous 5 reporting weeks

Week	New York City			Statewide		
	Reason for admission indicated as for COVID-19	Admission indicated for other reason, but with positive COVID-19 results	Total with COVID-19	Reason for admission indicated as for COVID-19	Admission indicated for other reason, but with positive COVID-19 results	Total with COVID-19
November 28– December 4	14	9	23	49	36	85
December 5 - 11	12	10	22	44	26	70
December 12 - 18	26	17	43	58	46	104
December 19 - 25 (excl. 25 th)	88	49	137	137	91	228
December 26– January 1	227	158	385	339	232	571
January 2 - 8	191	186	377	318	287	605
Total	558	429	987	945	718	1,663

Source: HERDS

Table 5. Indicated reason for admission, among new admissions with COVID-19, previous 2 reporting weeks*

Region	Reason for admission*	Dec 26 – Jan 1		Jan 2 – Jan 8	
		n	%	n	%
New York City	COVID-19	227	59%	191	51%
	Other reason, but with COVID-19	158	41%	186	49%
Mid-Hudson & Long Island	COVID-19	66	59%	69	55%
	Other reason, but with COVID-19	46	41%	56	45%
Other Regions	COVID-19	46	62%	58	56%
	Other reason, but with COVID-19	28	38%	45	44%
Statewide	COVID-19	339	59%	318	53%
	Other reason, but with COVID-19	232	41%	287	47%

Source: HERDS

* Patients with reasons other than COVID-19 indicated may have had COVID-19 as a contributing cause for hospitalization and often have indicated symptoms for COVID-19

Table 6. Indicated reason for admission, most recent week of January 2-8, 2022*

Reason for Admission	New York City	Mid-Hudson & Long Island	Other Regions	Statewide
COVID-19	191	69	58	318
Acute Medical Condition	111	20	15	146
Chronic Medical Condition	21	3	6	30
Gynecology / Obstetrics	5	2	5	12
Injury / Trauma	7	8	3	18
Mental Health / Substance Abuse	13	4	12	29
Newborn Care	15	4	2	21
Surgical / Procedures	3	3	1	7
Other	11	12	1	24

Source: HERDS

* Patients with reasons other than COVID-19 indicated may have had COVID-19 as a contributing cause for hospitalization and often have indicated symptoms for COVID-19

Table 7. COVID-19 symptoms among new COVID-19 admissions, previous 2 reporting weeks

Region	Symptomatic for COVID-19	Dec 25 – Jan 1		Jan 2 – Jan 8	
		n	%	n	%
New York City	No	120	31%	130	34%
	Yes	265	69%	247	66%
Mid-Hudson & Long Island	No	35	31%	50	40%
	Yes	77	69%	75	60%
Other Regions	No	15	20%	39	38%
	Yes	59	80%	64	62%
Statewide	No	170	30%	219	36%
	Yes	401	70%	386	64%

Source: HERDS

Table 8. Comorbidities indicated*, among new admissions with COVID-19, previous 2 reporting weeks

Region	Comorbidities	Dec 26 – Jan 1		Jan 2 – Jan 8	
		n	%	n	%
New York City	No	204	53%	191	51%
	Yes	181	47%	186	49%
Mid-Hudson & Long Island	No	71	63%	84	67%
	Yes	41	37%	41	33%
Other Regions	No	32	43%	54	52%
	Yes	42	57%	49	48%
Statewide	No	307	54%	329	54%
	Yes	264	46%	276	46%

Source: HERDS

* Only presence/absence of comorbidities, not details, available in HERDS reporting



Current hospitalizations among children 0-18 years

Key findings

- Current hospitalizations provide a different perspective from new admissions, describing the current burden in the hospitals, rather than the occurrence of new severe disease.
- The pediatric bed census on the days in Table 9 continues to rise, in accordance with new admissions, to 289 children hospitalized on January 8, 2022. Although length of stay data are not currently available, the lower levels of currently hospitalized patients, relative to new admissions, suggests average lengths of stay < 1 week.

Table 9. Patients currently hospitalized with laboratory-confirmed COVID-19, end of reporting weeks

Week end date	New York City	Mid-Hudson & Long Island	Other Regions	Statewide
Dec 4	11	3	25	39
Dec 11	16	6	13	35
Dec 18	35	4	19	58
Dec 24*	85	28	29	142
Jan 1	166	54	29	249
Jan 8	183	61	45	289

Source: HERDS

* No data were reported on December 25, the end date for this week.

Vaccination: coverage, breakthrough infections and hospitalizations, and vaccine effectiveness

Tables 10 and 11 provide data from analyses of linked immunization (NYSIIS/CIR), testing (ECLRS), and hospital admissions databases (HERDS). The methods utilized have been extensively described in our previous studies and online NYS DOH dashboard. Analyses of the pediatric population were not presented separately in those works and are now displayed below, in-depth. Estimates are provisional and subject to change as new data are reported, particularly in more recent weeks.

Key Findings

- By the week of January 3-9 2022, the percent fully-vaccinated (series completion + 14 days) was low for children 12-17 years (62.2%) and particularly those 5-11 (18.8%), per Table 10. Children 0 – 4 years remain unvaccinated, and thus unprotected by vaccines, and are excluded from these tables. Full vaccination is necessary to have the most protection from COVID-19 and insufficient coverage is likely a significant driver of increased COVID-19 risk for children.
- Examining new laboratory-confirmed infections (cases), per Table 10:
 - For children 5-11 years, in the week of January 3-9, rates were 2.3-fold higher for those unvaccinated relative to vaccinated, yielding an estimated vaccine-effectiveness (VE) of 57%. In conjunction with low 18.8% coverage, this yields 10% of cases occurring among vaccinated children.
 - For children 12-17 years
 - Daily case rates were very high for both unvaccinated (630/100,000 persons) and vaccinated children (283/100,000 persons), in the week of January 3-9. The 2.2-fold higher rates for unvaccinated children yields an estimated vaccine-effectiveness of 55% against becoming a case.
 - Over the 6 weeks shown, the rates of breakthrough infection have been steadily rising and faster than those for unvaccinated children, yielding a decline in VE from 86% to 55% in recent weeks (more than for adults). This may be due to the increasing prevalence of the Omicron variant in New York State (to estimated 99.3% by January 8, 2022 per CDC’s program for HHS Region 2 including New York), which has been associated with a reduced vaccine effectiveness, particularly for



populations that have not received a booster dose.⁷ On January 5, 2021, [CDC recommended](#) that all children 12-17 receive a booster dose 5 months after their primary series.

- In conjunction with 62.2% full-vaccination coverage, these declines in VE yield an increase of cases among vaccinated children (breakthrough infection) from 20% to 46% in recent weeks. Nonetheless, vaccinated children in New York remained less likely to become COVID-19 cases during the weeks analyzed, demonstrating the continued protection from vaccines.
- Examining new hospital admissions with laboratory-confirmed COVID-19, per Table 11:
 - Hospitalization rates were higher in unvaccinated (2.74/100,000 persons) versus vaccinated children (0.67/100,000 persons), in the week of January 3-9. The 4.1-fold higher rates for unvaccinated children yields an estimated vaccine-effectiveness of 75% against hospitalization.
 - Similar to cases, the rate of hospitalizations among fully-vaccinated children has been increasing more rapidly than the rate among unvaccinated children. This pattern yielded a decline in vaccine effectiveness VE for hospitalization, from 95% to 75% for children 12-17 years, in the weeks studied. This may be likewise a result of increasing Omicron variant prevalence, as described above.
 - Together with vaccine coverage, this has shifted the share of hospitalized 12-17 year old children from 9% to 31% in the observed weeks. Because of the small numbers, caution should be used in interpreting these and all estimates related to new admissions and vaccination.
 - Despite these changes, vaccines strongly protected children from hospital admission, with 75% protection in the most recent week.
- **These data suggest that the relative increases in hospitalizations for children may be due to: reduced vaccine coverage *and* modestly-reduced vaccine effectiveness against hospitalization for children 5-17 years, relative to adults, and the absence of vaccine coverage for children 0-4 years.**

Table 10. COVID-19 Cases among children 5-17 years, by vaccine status

Week*	Distribution of new cases by vaccine status						Rates and vaccine effectiveness			Full-vaccine Coverage
	Vaccinated		Partially-vaccinated		Unvaccinated		Vaccinated rate per 100k	Unvaccinated rate per 100k	VE	%
	Cases	% of cases	Cases	% of cases	Cases	% of cases				
5 -11 years **										
Dec. 13-19	205	2%	1,355	12%	10,150	87%	40	148	73%	5.4%
Dec. 20-26	1,051	5%	2,689	13%	17,064	82%	91	259	65%	12.0%
Dec. 27-Jan. 2	2,897	8%	4,460	12%	28,720	80%	185	453	59%	16.4%
Jan. 3-9	3,889	10%	4,956	12%	31,024	78%	217	504	57%	18.8%
12 – 17 years										
Nov. 29-Dec. 5	851	20%	118	3%	3,363	78%	15	107	86%	59.8%
Dec. 6-12	1,309	23%	145	3%	4,282	75%	23	138	84%	60.2%
Dec. 13-19	4,159	37%	379	3%	6,770	60%	72	223	68%	60.7%
Dec. 20-26	10,210	43%	907	4%	12,849	54%	175	433	60%	61.3%
Dec. 27-Jan. 2	16,109	44%	1,321	4%	18,872	52%	273	651	58%	61.8%
Jan. 3-9	16,789	46%	1,520	4%	17,953	50%	283	630	55%	62.2%

Source: ECLRS, NYSIIS/CIR

* Data are still accruing in most recent weeks. In particularly those from the previous 3 weeks are subject to the largest amount of uncertainty; estimates are likely an undercount and are subject to most change.

** < 1% of this age group fully-vaccinated in previous weeks



Table 11. New COVID-19 hospital admissions among children 5-17 years, by vaccine status

Week*	Distribution of new hospitalizations by vaccine status						Rates and vaccine effectiveness			Full-vaccine Coverage
	Vaccinated		Partially-vaccinated		Unvaccinated		Vaccinated	Unvaccinated	VE	%
	Hosp	% of hosp	Hosp	% of hosp	Hosp	% of hosp	rate per 100k	rate per 100k		
5-11 years **										
Dec. 13-19	0	0%	2	10%	18	90%	0	0.26	100%	5.4%
Dec. 20-26	2	4%	3	6%	49	91%	0.17	0.74	77%	12.1%
Dec. 27-Jan. 2	3	3%	13	14%	77	83%	0.19	1.21	84%	16.4%
Jan. 3-9	4	4%	7	6%	100	90%	0.22	1.62	86%	18.8%
12-17 years										
Nov. 29-Dec. 5	2	9%	0	0%	20	91%	0.03	0.64	95%	59.8%
Dec. 6-12	1	8%	1	8%	11	85%	0.02	0.36	95%	60.2%
Dec. 13-19	7	23%	1	3%	22	73%	0.12	0.73	83%	60.7%
Dec. 20-26	18	26%	6	9%	45	65%	0.31	1.52	80%	61.3%
Dec. 27-Jan. 2	36	30%	4	3%	79	66%	0.61	2.72	78%	61.8%
Jan. 3-9	40	31%	9	7%	78	61%	0.67	2.74	75%	62.2%

Source: HERDS, NYSIIS/CIR

* Data are still accruing in most recent weeks. In particular those from the previous 3 weeks are subject to the largest amount of uncertainty; estimates are likely an undercount and are subject to most change.

** < 1% of this age group fully-vaccinated in previous weeks

References

1. Rosenberg ES, Dufort EM, Blog DS, et al. COVID-19 Testing, Epidemic Features, Hospital Outcomes, and Household Prevalence, New York State-March 2020. *Clinical Infectious Diseases*. 2020;71:1953-9. 10.1093/cid/ciaa549
2. New York State. COVID-19 Data in New York. 2022. (Accessed 1/02/2022, at <https://coronavirus.health.ny.gov/covid-19-data-new-york>.)
3. Rosenberg ES, Holtgrave DR, Dorabawila V, et al. New COVID-19 Cases and Hospitalizations Among Adults, by Vaccination Status - New York, May 3-July 25, 2021. *MMWR Morbidity and Mortality Weekly Report* 2021;70:1306-11. 10.15585/mmwr.mm7037a7
4. Rosenberg ES, Dorabawila V, Easton D, et al. Covid-19 Vaccine Effectiveness in New York State. *New England Journal of Medicine* 2021. 10.1056/NEJMoa2116063
5. Wanga V, Gerdes ME, Shi DS, et al. Characteristics and Clinical Outcomes of Children and Adolescents Aged <18 Years Hospitalized with COVID-19 - Six Hospitals, United States, July-August 2021. *MMWR Morbidity and Mortality Weekly Report* 2021;70:1766-72. 10.15585/mmwr.mm705152a3
6. New York State. COVID-19 Breakthrough Data Report. 2021. (Accessed 9/29/2021, at <https://covid19vaccine.health.ny.gov/covid-19-breakthrough-data-report>.)